

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) An optical image detector that illuminates incident lights on a surface of an object, the optical image detector comprising:

a single light source; and

an incident light generator configured to receive a light from the single light source and to generate at least two groups of incident lights having different incident angles with respect to the surface of the object, and then directed toward the object to generate an image for surface morphology of the object.

2. (Currently Amended) The optical image detector according to claim 1, wherein the incident light generator comprises:

a first reflecting plate reflecting the lights of the single light source to generate a first group of incident lights having a first incident angle with respect to the surface of the object;

a second reflecting plate reflecting the lights of the single light source to generate a second group of incident lights having a second incident angle greater than the first incident angle with respect to the surface of the object; and

a third reflecting plate reflecting the lights of the single light source to generate a third group of incident lights having a third incident angle greater than the second incident angle with respect to the surface of the object.

3. (Original) The optical image detector according to claim 1, further comprising an optical sensor that is disposed over the surface of the object to sense the lights reflected from the surface of the object, wherein the optical sensor converts an image for the surface morphology of the object into photocurrents.

4. (Currently Amended) A navigation device comprising:

a case including a lower panel having an opening;

a single light source installed in the case; and

an incident light generator disposed adjacent to the single light source and configured to receive a light from the single light source and to generate at least two groups of incident lights having different incident angles with respect to a surface of an object, wherein the incident lights are illuminated on the surface of the object through the opening.

5. (Currently Amended) The navigation device according to claim 4, wherein the single light source is a light emitting device that generates infrared or visual spectrum rays.

6. (Previously Presented) The navigation device according to claim 4, wherein the at least two groups of incident lights comprises:

a first group of incident lights having a first incident angle with respect to the surface of the object;

a second group of incident lights having a second incident angle greater than the first incident angle with respect to the surface of the object; and

a third group of incident lights having a third incident angle greater than the second incident angle with respect to the surface of the object.

7. (Currently Amended) The navigation device according to claim 6, wherein the incident light generator comprises:

a first reflecting plate reflecting the lights of the single light source to generate the first group of incident lights;

a second reflecting plate reflecting the lights of the single light source to generate the second group of incident lights; and

a third reflecting plate reflecting the lights of the single light source to generate the third group of incident lights.

8. (Original) The navigation device according to claim 4, further comprising an optical sensor that is disposed over the opening to sense the lights reflected from the surface of the

object, wherein the optical sensor converts an image for the surface morphology of the object into photocurrents.

9. (Currently Amended) An optical image detector which illuminates incident lights on a surface of an object to generate an image corresponding to a surface morphology of the object, the optical image detector comprising:

a single light source generating a first light; and

an incident light generator configured to reflect the first light to generate at least two groups of incident lights having different incident angles with respect to the surface of the object, and then illuminate on the surface of the object; and,

wherein the incident light generator comprises:

a first reflecting plate configured to reflect the first light to generate a first group of incident lights having a first incident angle with respect to the surface of the object;

a second reflecting plate configured to reflect the lights of the single light source to generate a second group of incident lights having a second incident angle greater than the first incident angle with respect to the surface of the object; and

a third reflecting plate configured to reflect the lights of the single light source to generate a third group of incident lights having a third incident angle greater than the second incident angle with respect to the surface of the object.